NBC NEWS - STS-2 LAUNCH (11-12-1981)

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From Thursday, November 12th 1981 NBC NEWS Coverage of the launch of STS-2, the 2nd Space Shuttle mission. Coverage runs from 9:48:52 A.M E.T - 10:37 A.M E.T, Launch at 10:09:59 A.M E.T

STS-2 CREW:
Commander: Joe Engle
Pilot: Dick Truly

- Launched at 10:09:59 A.M E.T

00:00:00 (https://www.youtube.com/watch?v=auzV412Glts)

back at the kennedy space center where we are awaiting the end of a hole as we begin then at t minus nine toward a liftoff at ten this morning the astronauts are ready to go they've been telling their communicators here the windows are clean they can see out of them just fine and as joe engel put it we think it was joe angle we'll see you in about a week so obviously they are anticipating no more problems between now and that scheduled ten o'clock liftoff we'll be back with more coverage from the kennedy space center of the attempt to launch the columbia orbiter right after this station break introducing new natural start natural fiber laxity better for your system and better tasting better than chemical stimulants because natural grain fiber works with your system gently more naturally and the new caramel like form was proven better tasting preferred three to one in a test over the regular leading fiber laxative to relieve constipation use new natural start natural fiber laxity [Music] israelis opposed mideast peace alternative the story at noon momentarily that clock that you see in the lower right hand corner of your screen should begin counting down once again toward a 10 a.m liftoff here from the kennedy space center cape canaveral florida and we expect to hear from the voice of the mission launch control hugh harris describing for us of what we can expect next everything looks very good at this point that's not good enough of course because problems can develop between now and 10 am this morning when many of the functions of the columbia orbiter and the launch of the space transportation system

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transportation system many of the functions begin to take effect you'll recall that just eight days ago it was stopped at t minus 31 and holding which is only second place for uh i guess for a last second hold there was one at what 18 seconds you think at some point oh we had one at t plus three seconds we had ignition but not liftoff yeah we should have the clock going at this point we think according to our own clocks about 15 seconds beyond what it should be we're waiting for hugh harris the uh nasa spokesman to make an announcement he it ought to be coming up momentarily but they are about a half a minute now behind the schedule they had set for themselves to uh as they say pick up the count here's you minus nine minutes and holding launch director george page asked for a slight delay in picking up the countdown at this point well he checked a couple of things which he heard during the countdown he has just checked with the range safety officer to determine that a steady drop out of the main carrier uh wave that is used by the rain safety people uh is not serious and that a backup carrier signal uh is satisfactory he is also checking on several other things and we will get back to you as soon as a determination has been made to pick up the countdown this is shuttle launch control interesting because uh shuttle launch control announced about five minutes ago that uh launch director page had been told by the various managers of parts of this system that there were no constraints on launch so he's going over those figures very carefully and we are now for the first time this morning in an unscheduled hold uh that is lasting a little bit longer than we had expected but as you can see a beautiful day here on everything mechanical that we're aware of is ready to go the spacecraft seems fine what is a main carrier wave joe kerwin

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what is a main carrier wave joe kerwin well they're talking about a uh a transmitter failure near as i can figure out it's the uh it's the main wave on which you modulate to uh produce voice or in this case commands but again they're checking to see whether the backup is satisfactory because most of these systems have not only a single backup but a second back up to that as well and i expect he'll get that answer but he wants to make sure as near as i can figure this would be the the transmitter on which the safety officer transmitted abort commands to the spacecraft could it be the uh frequency on which they if they had to blow something up they would train it could be that one as well yes yeah one we hope we don't have to use i'm fully aware of that dr kerwin i must say that uh somewhat to the credit of much of the credit of nasa it's always astounding to me at how much we can listen in on we hear a great deal on the loops that are available as george page talks to his various people as we hear from hugh harris describing what is going on right now they're a little quiet as they make these checks in a quieter loop the fact is an awful lot of information is made public during the course of uh these launches and attempted launches and last week let's listen to hear what we're going to that's that's from the that's one of the astronauts we just heard yeah thank you george and we concur with everything you said we'll get it all right that was one of the astronauts responding to george page sounds pretty positive that was single right yeah i mean they don't sound as though there's any trouble even though this hold has lasted three minutes longer than we thought it would have i think mr page is being conservative because uh this is his last big chance to make sure everything they don't want to lose this one huge control at t minus nine minutes and holding launch director george page has checked on a number of problems which had come up during the countdown to determine that there are no constraints at the present time he has spoken to the launch crew and says let's take our time it's been a hard one watch all your data but we're going to do it right uh

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but we're going to do it right uh he has uh spoken to the uh the crew and he's uh to joe engel and to dick truly and said we're going to give you a good one we're in the process now of the test conductor going over the whole criteria with the launch team to let them know what points holds can be called and what the proper procedure is to call that hold launch director george page has told the launch team to take their time and do it right we're standing by now to get word of the point at which we will be picking up at the t minus nine minutes point this is shuttle launch control once again the voice of hugh harris summing up the situation there they're going through very carefully the uh the situation in case they have to have another hold for one thing between once they start the clock at nine between that and the time of liftoff they did have a hold last time around that was computer activated this time they're going through the various check offs to see that everything is all right they're checking the final uh launch verification systems downrange does that make sense i guess it doesn't entirely do it what we're still waiting for we have to presume was what we were told before that the range safety communications network is being looked at to see if they can make that work and there's some anomaly i believe you say working on that the reason that it's very quiet is that everything else seems to be working fine everybody said they're ready to go all the other very stations along the way now they want to check those and then they want to go over again this business that they have to put another hold on i don't quite understand why they're talking about that myself um that's a routine thing i think is it just that every launch at this point in time they go over now once more guys at five minutes we can hold for this long at three minutes and so on well i think they in fact just did that a few moments ago and now that they have an opportunity well george page checks everything else

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well george page checks everything else they're going to go run through that procedure again that's what it sounded like to me because i wasn't sure they'd gotten to that point or whether they were still ironing out these little problems but at any rate once they begin the nine-minute countdown as we say at one point hugh harris said things happen so fast that we cannot humanly describe them in fact they happened so fast they couldn't override the computer last computers begin to take over after nine minutes it struck me that in in apollo we had three crew members and one computer on the spacecraft and in uh shuttle we have two crew members and five computers five computers i wonder if this is a trend we've been talking a lot about dick truly today who is 44 years old he's the pilot the navy captain on board the columbia orbiter but think for a moment of joe engel the air force colonel who flew the x-15 at two altitudes of 50 miles that qualifies as space he was scheduled to go for a moon landing on apollo and the fact of the matter is that the budget constraints on that program cut him out of it and he was replaced instead by a geologist he was replaced by now u.s senator harrison schmidt so joe engel who has been waiting for 15 years finally gets his moment in space and as you heard him just a few moments ago he's willing to wait a couple of minutes more as george bates makes sure that everything is working just the way they want it to they've had more than their share of difficulty here with the columbia in the last week or 10 days or so beginning last week when they had to stop the launch at just 31 seconds before liftoff and then yesterday as they had to rush out to california and pick up a black box one of the sensory pieces of equipment that they put in there and had to rush that back they want to make sure they get it off this morning you know life is full of tricks of fate when you're an astronaut tom mattingly is the uh backup commander on this and he couldn't go on apollo 13 because he had the germany just ordered that the clock will be picked up at one minute after 10 eastern standard time this morning we have just had a check of the various major managers for this morning's launch norm carlson has conducted that

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norm carlson has conducted that check and all of the managers have said they are ready to pick up at the proper time [Applause] so you heard hugh harrison director george page has just asked slayton the ofp launch manager if he is go and d clayton has said he is go for launch we're about two minutes away from picking up the countdown at the t-minus nine minute point which would result in a launch at 10 10 a.m this morning this is shuttle launch control that's a 10-minute delay in what they had originally scheduled this morning and not originally scheduled but they scheduled overnight the original scheduled liftoff time today was 7 30 a.m that's a delay of eight days that was the liftoff time scheduled for last week when the difficulties developed now they've added another 10 minutes so they've had a delay officially of eight days two hours and now 40 minutes it all goes well but so far as we know they plan what they call a nominal mission that is five days altogether 83 orbits of the earth each one takes about 90 minutes and they are scheduled to set down in california next week about midday now it would be in the eastern time zone and uh what about 10 30 in the morning before you go around 10 30 11 o'clock yeah so it'll be about two in the afternoon for those of you who want to think about your day next week and we'll have live coverage of that landing as well i gather they've got what kind of a window do they have at the other end they just don't want to land in the dark for one thing they don't want to land in the dark they have the usual weather constraints we would like to have a crosswind for this landing a gentle one so as to test the orbiter out in those conditions and an afternoon landing gives you a better shot at that so the launch delay may give us uh a little extra information on on landing it occurred to some of us that we wouldn't have to get up quite as early in the morning to get out tonight well two out of two out of the three people won't have to get up as early let's go to launch control at the t-minus nine minute point

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all of the major managers have indicated they are ready to go and we are at t minus nine minutes and counting the launch sequence are now being controlled by the ground launch sequencer from now up to the t minus 31 second point when they'll switch to the onboard redundant set launch sequencer the ground line sequencer is part of the launch processing system and operates by relaying commands to the orbiter's onboard computers which then reports back to the launch processing system that the commands have been executed the primary job of the computers is to check that all of the launch commit criteria are being met such as propellant loads temperatures pressures and other measurements the chase aircraft have been launched from patrick air force base we'll be back with more from the kennedy space center right after this of this morning if you like to brush at an angle you probably use this it has a nice angle but what counts is the brush at the end of the angle introducing new oral b right angle it gives you the oral b brush head recommended by more dentists than any other there are lots of angled toothbrushes only one gives you the brush more dentists recommend new oral b right angle i'm cooking for the world's most exciting man so what i make has to be terrific that's why i depend on all right of french fries because i know every batch will taste great when i make a ride of fries [Applause] [Music]

[00:14:05 (https://www.youtube.com/watch?v=auzV412GIts&t=845s)](https://www.youtube.com/watch?v=auzV412GIts&t=845s)

the clock is counting here at the kennedy space center you hear hugh harris and what you're seeing now is the orbiter access arm retracting away attached to the service structure and used by the crew to walk across to the orbiter so long columbia the crew has been advised to lower their helmet visors and at t minus six minutes we'll begin preparations for starting of the auxiliary power unit the apu's are turbine devices fueled by decomposing hydrazine liquid which provides hydraulic power to change the angle of the engine to operate the aerodynamic surfaces engine valves and during landing operate the landing gear coming up on the t minus six minute point in our countdown hugh harris the apu that he was just talking about is where they had the difficulty last time around they had to change the oil and the filters in two of those three units t-minus six minutes and counting the pilot dick truly has begun the apu pre-start activity and it is complete the development fight instrumentation which measures stretches on the orbiter during fight have been turned on recorder stop uh for playback after landing t minus five minutes forty seconds and counting this is the point at which the captain california and pilot dick truly has signified the auxiliary power units are ready to be started t-minus five minutes 15 seconds and counting

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we're coming up on the t minus five minute point two one t minus 5 minutes we have a goal for apu start and the start sequence has begun t-minus four minutes 44 seconds and counting sir uh that should work minus 4 30. t-minus 4 minutes 30 seconds and counting we have a total of 16 minutes of hydrazine supply for running the apu's prior to a lift-off okay if you start his complete [Applause] [Music] t-minus four minutes ten seconds and counting t minus four minutes we have begun nitrogen purge of the main engines on the orbiter t minus 3 minutes 50 seconds and counting t minus 3 minutes 45 seconds the elevon speed brake and rudder are being moved through a pre-programmed pattern to assure that they'll be ready to be used in flight little exhaust from the apu is coming out the tail of the orbiter indicating that all is well t minus three minutes 28 seconds and counting the shuttle is now on internal power however the fuel cells are still receiving their fuels from the ground support system through the tail service mass for one more minute t minus three minutes 15 seconds the profile checks of the arrow surfaces have been completed and checked t-minus three minutes

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and checked t-minus three minutes five seconds the engine gimbal or movement check is underway to assure that they're ready for flight control t-minus two minutes fifty-five seconds and counting the locks valve on the external tank has been closed and pressurization begun after the tank is pressurized the hole capability is limited okay minus two minutes forty seconds we have cleared the caution and warning memory the gaseous oxygen vent arm is being retracted t-minus two minutes thirty seconds and counting the fuel cell ground supply of oxygen and hydrogen has been terminated and the vehicle is on its onboard supply t minus two minutes 15 seconds the main engines have been gimbaled to their start position and the pressure on the liquid oxygen tank is at slight pressure coming up on the two-minute point [Applause] t-minus two minutes and counting the liquid hydrogen vent valve has been closed and flight pressurization underwear t-minus one minute 50 seconds and counting the gaseous oxygen vent arm is almost fully retracted t minus one minute

40 seconds and counting t minus one minute thirty seconds ninety seconds away from launch of sts2 [Applause] t-minus one minute 15 seconds and counting the liquid hydrogen tank is at flight pressure [Applause] coming up on the one minute point in our

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coming up on the one minute point in our countdown everything going smoothly [Applause] t minus one minute and counting t minus fifty seconds the firing system for the ground suppression water is armed [Applause] t minus 40 seconds development flight instrument recorders are on t minus 37 seconds we're about just a few seconds away from switching control of launch to the computer sequencer we have control of the countdown now being conducted by the launch sequencers onboard the orbiter t minus 20 seconds and counting the srb hydraulic power units have started the srb nozzles have been moved to start position coming up on 10 t minus 10 9 we have gopher main engine starts we have main engines start minus three two one we have ignition we have ignition of the solid rocket boosters lift off of america's space shuttle and the space shuttle has cleared the tower houston now controlling the mission control confirmed roll maneuver started 20 seconds thrust looks good 25 seconds rolling over completed 30 seconds columbia now one nautical mile in altitude 35 seconds status check commission controlled by flight director neil hutchinson give it a go at 40 seconds columbia houston your go at 40. faster 48 seconds throttling is down for mexican ignore the natural alarm

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mexican ignore the natural alarm columbia [Music] coming up on create a maximum aerodynamic pressure on the vehicle mark one minute columbia now five nautical miles also two three nautical miles downrange velocity now reading 2300 feet per second one minute eight seconds pass through mexico colombia is still looking good throttling engines back to 100 percent mark 120 seconds columbia now nine nautical miles in altitude six nautical miles downrange velocity now reading three thousand feet per second [Music] mark one minute 35 seconds columbia now 14 nautical miles in altitude 10 nautical miles down the range you can expect an evap cnw one one minute 45 seconds coming up on negative seats where altitude's too high for ejection to hit your negative seats mark one minute 55 seconds columbia now 21 nautical miles in altitude 18 nautical miles downrange velocity now reading 5000 feet per second standing by now for a solid rocket booster separation confirmation 205 roger copy pc lesson 50. two minutes 25 seconds onboard guidance is converging this program colombia is now steering for its precise window and space for main engine cutoff columbia now 35 nautical miles in altitude 40 nautical miles downrange [Applause] coming down and looking good roger columbia thank you mark two minutes 45 seconds columbia now has two engine landing capability at rotor naval air station spain

[00:24:01 (https://www.youtube.com/watch?v=auzV412Glts&t=1441s)](https://www.youtube.com/watch?v=auzV412Glts&t=1441s)

two minutes 54 seconds status check and mission control given a goal for three minutes [Applause] houston you're looking good at three try to tell me looking good at three mark three minutes eight seconds columbia now 46 nautical miles in altitude 66 nautical miles downrange columbia's three main engines continue to run smoothly angle and truly really moving out now velocity now reading 6 700 feet per second mark three minutes 30 seconds columbia now 52 nautical miles in altitude 85 nautical miles downrange velocity now reading seven thousand feet per second return status check in the mission control by flight director neil hutchinson england truly given a go to continue mark three minutes 55 seconds columbia now 58 nautical miles in altitude 112 nautical miles down range velocity now reading 7 900 feet per second four minutes eight seconds standing by for a negative return and pressed ato call-ups by capcom brandenstein for negative return mark negative return sounds good well that call up england truly now committed to space travel they can no longer turn around and return to launch site four minutes 35 seconds columbia now 60 columbia houston you're pressed the ato looking good here four minutes 44 seconds for the first time columbia has forward abort to orbit capability on two engines by throttling engines up to 107 percent

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by throttling engines up to 107 percent [Applause] five minutes columbia now 68 nautical miles in altitude 189 nautical miles downrange velocity now reading 10 300 feet per second columbia houston your normal throttles five minutes 14 seconds i'd call up by capcom brandon stein says is england truly now capable of abort to orbit on two engines without throttling up colombia's engines five minutes 25 seconds columbia now 68 nautical miles in altitude 228 nautical miles downrange mark 5 minutes 40 seconds standing by for press tomiko columbia houston your press to mikko parker good show dan this is really smooth five minutes the preston eco call from capcom brandenstein says should colombia lose but one engine press on keep flying forward columbia's engines have enough uh energy to a two uh two achievements your single engine rotor and everything's looking good okay and looking good here mark six minutes eighteen seconds that report from capcom brandenstein indicates if a two engine failure occurred colombia is capable of an emergency landing at road enable air station spain mark six minutes 30 seconds columbia now 68 nautical miles in altitude 346 nautical miles downrange velocity now reading 14 900 feet per second everything looking very good on the launch of the columbia orbiter which had been trouble plagued for the last 10 days or so but it took off

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days or so but it took off 10 minutes late this morning after a scheduled liftoff of ten it went off at 10 10. and as you can hear the capsule communicator the capcom is navy captain daniel brandenstein we're also hearing john mccleesh we're moving toward now main engine cut off miko at eight minutes into the flight let's listen for just a moment columbia houston your single engine prestamico [Applause] seven minutes twenty seconds that report says that england truly can achieve normal engine cut off targets even if two engines go out mark seven minutes 30 seconds columbia now 64 nautical miles in altitude 511 nautical miles downrange velocity now reading 20 000 feet per second [Applause] seven minutes 43 seconds g-forces building for england truly now coming up to three g's columbia now 63 nautical miles in altitude 562 nautical miles downrange market eight minutes main engines slowly being throttled back now should be throttled at 65 percent at six seconds before main engine cutoff columbia now 63 nautical miles in altitude 645 nautical miles downrange velocity now reading 24 000 feet per second and they're close and in a few seconds the big external fuel tank that giant minutes 28 seconds standing by now for main engine cut off first the engine stopped then the tank separates columbia confirmed shutdown columbia now returned to space not yet returned orbit uh standing by now for external tank separation lobby houston you can ignore the imu bytes

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exactly what it's supposed to happen is 58 seconds confirm external tank separation columbian columbia now perform an evasive maneuver moving below and beyond the external tank and the tank will land in the indian ocean whoa what's up 9 minutes 15 seconds go no go status check emission control for the first homes burn roger columbia we're looking at them ohms is orbital maneuvering system that's to get it into the right configuration so it can go into orbit they're having a few nuisance alarms in the cockpit i've heard him a couple of times colombia for apu shutdown on time that's a big goal 44 seconds a columbia now maneuvering homes one burn attitude using the two six thousand pound thrust engines holmes one will be posigrade moving columbia forward and higher on her flight path placing colombia in orbit it's the switch from being an airplane to a spacecraft right going on right now yep they're the the go to shut down the uh auxiliary power units means no landing on this passage roger and the evap to shut down we'll need it cycled off and then back to his primary on does a nuisance alarm make a lot of noise it's a ding-dong noise in a in a red light roger you want to check on the other race okay it sounds like their uh cooling water evaporator cycled off aunt miko and they're gonna

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cycled off aunt miko and they're gonna turn it back on here in a moment they've got two of those too right in columbia houston uh we're about 40 seconds from los both homes engines look good going over the hill configure los we'll see at madrid los is loss of signal that means they'll be out of touch for a while yeah and as long as they're out of touch we're going to show you i think one of the best sites anybody can ever see anytime and that's the liftoff of the columbia orbiter here this morning 10 minutes past their scheduled liftoff time of 10 but in the final seconds everything went very smoothly here's what it looked like lifting off pad 39a at the kennedy space center cape we have go for canaveral engine start we have the main engine started and the space shuttle has cleared the tower houston now controlling the mission control confirmed role maneuver started 20 seconds the wrestling's good 25 seconds rolling over completed [Music] 30 seconds columbia now one nautical mile in altitude 35 seconds status check emission controlled by flight director neil hutchinson give it a go at 40 seconds columbia houston your go at 40. roger 40. master arm and it's the 48 seconds throttling is down for mexico alarm columbia coming up on create a maximum aerodynamic pressure on the vehicle mark one minute columbia now five nautical miles in altitude three nautical miles downrange velocity now reading 2300 feet per second one minute eight seconds pass through max q colombia still looking good

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max q colombia still looking good throttling engines back to 100 percent [Music] mark one minute 20 seconds columbia now nine nautical miles in altitude six nautical miles downrange velocity now reading three thousand feet per second exceptional pictures of the columbia orbiter as it headed toward an orbit today here from cape canaveral the kennedy space center will have more continuing coverage of the space shuttle system on this it's launch day but first this word why is our front wheel drive chevy citation such a hero with so many americans let's ask perfect couple our citation perfect car roomy perfection for five plus perfect wagon-like space for our twin golden retrievers perfect breed no wonder citation sales have passed a million thank you perfect couple but it's nine million okay nearly a million nobody's perfect surety makes good things happen the pm headache johnson i want that contract signed today it's from office tension that followed you home it's from daytime pressure that can sometimes build into the tension headache that could spoil your night for the pm headache get excedrin pm relief that combines a powerful pain reliever for your headache and a mild relaxer to help you get to sleep for the pm headache get excedrin pm relief help your cat to thrive help your [Music] drive cat food from purina with nutritional ingredients from all four basic food groups thrive is nutrition at its best a hundred percent complete and balanced [Music]

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some things are too good to keep to yourself like the jcpenney pre-holiday sale with savings on motion skirt the bow blouse and motion pant keep saving on denim jeans for men and flannel shirts plus 30 percent off kids outerwear for keeping house these bath towels are 25 off and save nine dollars on this electric blanket the fabulous pre-holiday sale keep it up jc penney we're back at kennedy space center where launch pad 39a is now empty the columbia orbiter headed for madrid spain where we expect to hear from it in about oh three minutes and 30 seconds once again astronauts angela and truly looking forward to what appears to be a very good flight they got off this morning at 10 10 eastern time and for those of us who were here in florida it was a remarkable sight because we could step outside and watch it what we figured i'm 55 or 60 miles into space well we saw it at a great great distance into space i've seen a lot of these things go the weather had there were some little clouds in the sky but mainly we were able to follow the rocket with our glasses uh for about four minutes or five minutes and that was incredible we followed it with our eyes uh on through the separation of the uh fuel tanks which is i don't think i've ever seen solid rockets not solid yeah they're solid rockets the big ones on either side they come down in parachutes and then they reuse them again uh they are not using the ones from the last time around by the way they'll be reserved for a later flight but they are all recycled right that's right so you're breathing a little easier as a representative of nasa at this point mr kirwan you've been like to report that my pulse rate is down to 84. [Laughter] and sinking well that's good to know that was a big moment for nasa after all because they had a lot at stake here things have not gone well in the last week or so so they were able to get off the ground it does look like it'll go for its regular mission if everything

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for its regular mission if everything continues that would be 124 hours altogether five days landing next week in california do we have any additional pictures that we can show them at this time all right let's take a look at some of those right now if we can because there's no use in hearing us talk about it all when you can see these extraordinary sites of the columbia orbiter man's first used spaceship going back for a second time into familiar territory the the launch will be the actually the orbit will be at a slightly different configuration this time because they're carrying a lot more for one thing and they want to do a little more orbiting or a little more maneuvering up there with the with the spacecraft itself on the way back in at mach 24 24 times the speed of sound uh the two pilots astronauts engel and truly will be hands-on flying at some point to see how it operates at that stage that's right and they'll be in essence upsetting it a little bit and then watching to it how well it works to see how well the control system uh will correct errors just to remind you uh we'll be waiting to see in just uh not very long from now some television pictures from outer space and what what's going to happen is the orbiters are going to get upside down up there and it's going to open these big payload bay doors so that they can activate the cooling system and then as it comes back in it flops on over and it lands in about this configuration with enormous amount of heat building up here on the bottom of it where they have those tiles in place you'll also recall that the first time we saw television pictures from the first launch of the columbia orbiter we noticed the missing tiles back here so we'll be looking for that as well let's listen to shuttle control the acquisition of colombia through madrid we'll stand by as a conversation picks up between capcom brandenstein and uh columbia's flight crew of joe engel and dick truly you'll be hearing those phrases as john

[00:40:00 (https://www.youtube.com/watch?v=auzV412Glts&t=2400s)](https://www.youtube.com/watch?v=auzV412Glts&t=2400s)

you'll be hearing those phrases as john explained a moment ago through loss of signal as they equip around the world and various tracking stations through madrid we have you for uh four minutes configure aos okay dan we'll do it good shut down and uh everything's looking good aboard roger we saw the homes cut off look good to us and one point of interest we noticed that the right ohms oxidizer gauge hung up and it's indicating about fourteen percent high that's it right home roger and uh we're standing by to watch the gimbal drive check [Applause] [Music] you shut it down uh dumped in complete and the rest of the procedure is finally roger we copy that thank you okay dan secondary actuator check is coming mark roger joe kerwin what does that mean if they're having some more trouble with the uh lubrication system and the auxiliary power units where they change the oil and change the filters if the onboard instrumentation was reading correctly uh we haven't heard from houston on this but he said the oil temperature got hot uh possibly a plug nozzle possibly a heater that wouldn't shut off when it was in the number three unit you remember when the number three unit was the one that was replaced after the first shot no that was the number two one and three were the units giving us trouble last week but it could also be uh as joe knows it could also be they have a water system for cooling some of those as well and if the water system wasn't

[00:42:01 (https://www.youtube.com/watch?v=auzV412Glts&t=2521s)](https://www.youtube.com/watch?v=auzV412Glts&t=2521s)

as well and if the water system wasn't working that would bring you up to about 300 degrees just so and they were having a little trickiness with the water cooling system they had one a light that went off in one of the readings different cooling system that's the main evaporator that shut itself down and apparently is now up and functioning again they said nothing i think we ought to remember they've got three of those auxiliary power units they don't need three to land and this the number three may work again once it's they'll be shut down until tuesday yeah they'll shut down they'll these are the hydraulics that operate the rudder and the flaps and the and the various rocket engine they also operate the speed brakes which are real important when you're landing as you might expect power brakes power steering that's right yeah back at first thursday stella tries to put out an old flame on harper valley then the city slicker learns that a cowboy's best friend is a seat belt on lewis and blood then on different strokes kimberly tries her hand at modeling i found it amusing and on give me a break the chief's hot date gets a cold reception tonight is cowboy night on nbc okay world when do you drink juicy good sunny delight while you read all the news in the morning when it's time to sit back at lunch made with three different juices orange tangerine and lime vitamin enriched ready to drink in the dairy or produce section everyone knows value city means name brands at fantastic savings and right now at value city you'll save 50 on a little girl's famous label dress buyout carousel goes out of business and value city bought out a tremendous selection of hand smocked dresses for infants toddlers and little girls you'll save 50 off comparable prices you'll see the famous label in every dress

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dress you'll see these same dresses selling elsewhere at 15 to 20 dollars but at value city you'll pay only 699 799 and 8.99 during this sensational buyout shop one of value cities three toledo locations bolton promotions brings to toledo an even bigger antique show and sale this weekend at the masonic auditorium friday and saturday noon to 9 30 sunday noon to 5 30. israelis opposed mid-east peace alternative the story at noon astronauts engel and truly now about to lose their communication signal with houston mission control there as they rocket around the earth on this the first orbit of what they hope will be 83 orbits altogether in the columbia orbiter we're going to take a look one more time at how they left this planet earth this morning at 10 10 eastern standard time from the kennedy space center starts fine we have main engines three two minus three [Applause] houston now controlling the mission control confirmed role maneuver started 20 seconds thrust looks good 25 seconds roll maneuver completed 30 seconds colombian l1 nautical mile in altitude 35 seconds status check emission controlled by flight director neil hutchinson given to go at 40 seconds columbia houston your go at 40. [Music] maximum aerodynamic pressure on the vehicle

00:46:00 (https://www.youtube.com/watch?v=auzV412Glts&t=2760s)

vehicle mark one minute columbia now five nautical miles in altitude three nautical miles downrange velocity now reading 2300 feet per second one minute eight seconds pass through max q colombia still looking good throttling engines back to 100 percent mark one minute 20 seconds columbia now nine nautical miles in altitude six nautical miles downrange velocity now reading three thousand feet per second mark one minute 35 seconds columbia now 14 nautical miles in altitude 10 nautical miles down the range in columbia houston now you can expect an evap cnw one one minute 45 seconds coming up on negative seats where altitude's too high for rejection seats mark one minute 55 seconds columbia not 21 nautical miles in altitude 18 nautical miles downrange velocity now reading 5 000 feet per second standing by now for solid rocket booster separation compromises roger copy pc lesson 50. we're back you're looking at the launch the videotape recording of the launch of the columbia orbiter as it left here this morning at 10 10 for those of you who want to kind of set your morning according to our schedule we expect to get the first television pictures at about 11 45 eastern standard time this morning and we'll have live coverage across the country of course but that's how it looks at this time the first pictures will show that big payload bay as they open the doors that's critical to the cooling of the spacecraft the astronauts angle and truly now out of radio contact some small problems apparently developed on board how major they are we don't know some heating of the oil on one of the auxiliary power units they simply shut it down but things do look very good indeed for a successful flight of the columbia orbiter this the first used spacecraft

00:48:01 (https://www.youtube.com/watch?v=auzV412Glts&t=2881s)

orbiter this the first used spacecraft to go back into space and we'll be back with more from the kennedy space center after this

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